

Department of Environmental Quality
Northwest Region

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March 16, 2012

Mr. J. (Mick) Leitz Fred Devine Diving and Salvage, Inc. 6211 N. Ensign Street Portland, OR 97217

RE:

Completion of Source Control Decision The Marine Salvage Consortium, Inc. DBA Fred Devine Diving & Salvage 6211 N. Ensign Street Portland, Oregon ECSI #2365

Dear Mr. Leitz:

I'm writing in response to a February 17, 2012 email request from your attorney, LeAnn Bailey, for information about the status of DEQ's decision on source control at your site, within the context of DEQ's upland source control priorities in the Portland Harbor Superfund site. While you last were working with my colleague, Karen Tarnow, on stormwater source control, I have now been assigned as the project manager for your site.

## Background

As you know, DEQ is currently considering only the stormwater pathway from your site as having the potential to contribute to on-going or future contamination of the Willamette River. DEQ's initial request for Site Assessment was sent in 1999 and a high priority Expanded Preliminary Assessment was undertaken from 2001 through 2003. Based on catch basin sediment data from that assessment, DEQ then designated your site as a low priority, within the context of the DEQ/EPA Joint Source Control Strategy for Portland Harbor. You signed a Letter of Agreement with DEQ in 2006 toward undertaking a stormwater source control evaluation. Karen worked with you to approve a work plan in 2007 and provided technical assistance and review of data and stormwater source control evaluation submittals in 2008 and 2010.

While your stormwater investigations do provide a better understanding of the potential for stormwater to be a pathway of contamination to the river, unfortunately your evaluation did not allow for a defensible decision that control of potential sources had been demonstrated. Reasons included:

- 1) Stormwater data collection deviated from protocols approved by DEQ in your work plan and designed to provide the best possible representation of the site and limit the inherent variability in stormwater sampling and analysis. Specifically, stormwater sample collection in 2007 and 2008 occurred after 3 to 18.5 hours into the storms, and stormwater sample collection in 2009 did not include an antecedent dry period and may have occurred at a time of very little rainfall.
- 2) Based on catch basin sediment samples, the report concluded that reductions in concentrations of most pollutants had been achieved. However, significant concentrations of polyaromatic hydrocarbons (PAHs) and zinc and a modest increase in phthalates concentrations were indicated in catch basin sediment samples. Further, these same contaminants were also significantly elevated in the previous stormwater samples. This makes it difficult to confirm that sources have been adequately identified and best management practices applied are sufficient to address the sources.

In addition, there is currently no mechanism to ensure that best management practices, if they could be demonstrated to be effective, will continue to be applied and maintained for continued effective source control.

Because the information to date is inadequate for DEQ to complete a stormwater source control decision, DEQ's January 2012 Milestone Report to EPA on upland source control progress still lists your site as a low priority stormwater pathway with a source control evaluation in process.

## **Options for Completion of the Source Control Decision**

Your attorney's email requested input on steps to take to obtain a site designation as "decision deferred." While DEQ has not made such a designation on any site, the decision on your site has effectively been deferred since November 2010. However, DEQ would like to work with you to acquire adequate information to complete a favorable source control decision.

This is important because your site stormwater discharges through City of Portland outfall M-1 to the Swan Island Lagoon, which is a hydraulically unique area of the Portland Harbor, shown to have elevated sediment levels of zinc, PAHs, and phthalates [as well as arsenic, cadmium, copper, mercury, silver, tributyltin, polychlorinated biphenyls (PCBs), phenol, and dieldrin], and that modeling indicates is sensitive to stormwater contaminant loading. As DEQ's upland source control work comes to completion, DEQ must present a Harbor-wide evaluation of the potential for recontamination of the river with the aim of ensuring that the in-water remedies will continue to be effective. DEQ's goal is to complete this evaluation by the issuance of EPA's record of decision, expected in 2014. DEQ anticipates that upland sites that have not completed source control at the

time of the in-water record of decision will be subject to EPA directed actions intended to control sources or perform a site-specific analysis to demonstrate that uncontrolled sources do not have the potential to recontaminate in-water remedies.

I am willing to work with you toward completing the decision on your site in the most accommodating way possible. I understand from reviewing the file and internal discussions of the project history, that financial resources are a limiting factor for your company. Unfortunately, generation of the information needed to complete the decision will have some cost associated, no matter what option we arrive at, and costs could be significantly more to address uncontrolled sources at the time of EPA's record of decision. In consideration of costs, I would support foregoing further collection of sampling data, until source identification and control measures have occurred and effectiveness needs are determined. Some potential options include:

- 1) As the goal is to demonstrate effective source control, I would encourage you to revisit your site and operations for potential sources of PAHs, zinc, and phthalates. If, for example, pavement on site is treated with a sealant containing PAHs, building roofs are composed of galvanized steel that leaches zinc, or painted areas of the site contains phthalates, reasonable and low cost source control measures would be to recoat pavement, roofs or painted areas with non-toxic sealants or paints. DEQ could provide oversight on source identification and non-toxic products for this type of source control measure.
- 2) Without definitive identification of sources, you could focus on pollutant prevention from the existing stormwater conveyance system, for a more "presumptive remedy."
  - a. A first step would be to evaluate the potential for improving best management practices within the existing system. This may mean upgrading from passive catch basins and filters to mechanical treatment structures or proprietary devices.
  - b. Another approach would be to reconfigure or abandon the system such that stormwater is infiltrated on site with no or reduced discharge to the river, or treated on site with soil amended swales or other effective passive treatment prior to discharge.

Both options are expected to result in stable solutions that limit on-going maintenance, which will limit the uncertainty of continued effectiveness and also reduce costs.

With either of these options, confirmatory sampling of stormwater will be needed to demonstrate that actions taken are effective. This data will also be used to confirm stormwater contaminant load reductions in support of

the evaluation of potential for recontamination. Improvement on implementing the necessary sampling protocols will be important to ensure that the effort produces useful data. Depending on when source control implementation can occur, additional cost reductions may be realized by completing confirmatory monitoring under a water quality permit rather than under DEQ Cleanup program oversight. More information is anticipated to be available about this option in the coming year.

I encourage you to consider these options, some combination of them, and other ideas you or your consultants may have, and confer with me toward finding a reasonable path for completion of the source control decision at your site. You can reach me by email at <a href="mailto:liverman.alex@deq.state.or.us">liverman.alex@deq.state.or.us</a>, by phone at 503 229-5080, or at the address on this letterhead.

Sincerely,

L. Alexandra Liverman

Portland Harbor Stormwater Coordinator

cc:

LeAnn Bailey, Attorney Todd Zilbert, Wood Tatum

Jim Anderson, DEQ Portland Harbor Cleanup Manager